REMARKS

Claims 27-34, 37, 38 and 50 stand objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Accordingly, new independent 57 is allowable dependent claim 28 rewritten in independent form. Therefore, new independent claim 57 is in allowable form.

Furthermore, new independent 58 is allowable dependent claim 34 rewritten in independent form. Therefore, new independent claim 58 is in allowable form.

Claims 22-24, 26, 35, 36, 39, 42, 43 and 45-49 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kaufman (US 5,323,301). Claims 40 and 41 stand rejected under 35 U.S.C. 102(b) as being anticipated by Worley (US 5,552,925). Claims 25 and 44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman (US 5,323,301).

Independent claims 22, 40 and 45 are amended to recite: "each mobile plate is rotatably mounted on a pivot axis, wherein each pivot axis extends through a center of curvature (C) of a sphere, and <u>wherein the</u> **sphere is defined** <u>as a single spherical surface</u> in which *the mobile plates move relative to one another.*" Support for the amendment language is provided by exemplary embodiments of the inventions disclosed by the

originally-filed application at, for example, at Fig. 3. Kaufman and Worley, singularly or in any combination, fail to teach this limitation.

Worley teaches rotor blades 208 that move in a <u>plane</u> (Figs. 2 and 2A of Worley), not a <u>sphere</u>, and therefore, it is inconceivable that Worley teaches "<u>wherein the</u> **sphere is defined** <u>as a **single spherical** surface</u> in which *the mobile plates move relative to one another*" as positively recited by the respective independent claims. Furthermore, Kaufman teaches mirror segments 18a that move in curved slots 44 via plates 34 and pins 38 (col. 3, lines 30-50; Fig. 1). However, the curvature of each slot 44 as shown in Fig. 1 of Kaufman clearly demonstrates that the mirror segments 18a do not move in a "**single** spherical surface" because the respective slots 44 shown are too close together for their shown curvatures to form a single spherical surface. The Office is respectfully reminded that even though the mirror segments 18a of Kaufman meet together at a center point 18b (Fig. 2), this is **not** a teaching that mirror segments 18a move on a "**single spherical** surface" as positively recited by the respective independent claims. Accordingly, Kaufman and Worley, singularly or in any combination, fail to teach or suggest "<u>wherein the</u> **sphere is defined** <u>as a</u> **single spherical** <u>surface</u> in which *the mobile plates move relative to one another*" as positively recited by independent claims 22, 40 and 45. Since Kaufman and Worley fail to teach or suggest a positively recited limitation of the respective independent claims, independent claims 22, 40 and 45 are allowable.

Claims 24-39 and 51-54 depend from allowable independent claim 22, and therefore, the dependent claims are at least allowable for depending from an allowable independent claim. In addition, the dependent claims are allowable for reasons that are distinct to the allowability of independent claim 22.

Claim 41 depends from allowable independent claim 40, and therefore, the dependent claim is at least allowable for depending from an allowable independent claim. In addition, the dependent claim is allowable for reasons that are distinct to the allowability of independent claim 40.

Claims 46 and 49-50 depend from allowable independent claim 45, and therefore, the dependent claims are at least allowable for depending from an allowable independent claim. In addition, the dependent claims are allowable for reasons that are distinct to the allowability of independent claim 45.

For example, dependent claim 24 recites "the additional plate and the multiplicity of mobile plates comprising two different spherical surfaces whose centers of curvature (C) are identical." Worley teaches rotor blades 208 that move in a plane (Figs. 2 and 2A of Worley), not a sphere, and therefore, it is inconceivable that Worley teaches "two different spherical surfaces" as positively recited by claim 24. Furthermore, Kaufman teaches mirror segments 18a that move in curved slots 44 which are shown to be too close together for their shown curvatures to teach "two different spherical surfaces whose centers of curvature (C) are identical" as positively recited

LO29\030\M03 210295.doc

by claim 24. Accordingly, Kaufman and Worley, singularly or in any combination, fail to teach or suggest a positively recited limitation of claim 24, and therefore, the claim is allowable.

Moreover, dependent claim 25 recites "wherein the two different spherical surfaces have a mutual separation A of a few millimeters, preferably A < 1 mm." The office relies on case law to reject the claim: *Aller, Lacey, and Hall*, 220 F.2d 454 (page 7 of paper no. 20091003). However, the court for *In re Aller* stated that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation" referring only to ranges in <u>concentration</u> and <u>temperature</u>. 220 F.2d, at pg. 456, 105 USPQ at pg. 235. That is, only concentration or temperature are relevant physical characteristics for the application of this case law, **not a distance separation** as positively recited by claim 25. In fact, the MPEP makes it clear that *In re Aller* is only applicable to these <u>two</u> physical characteristics: temperature and concentration. *see also In re Swain and Adams*, 33 CCPA (Patents) 1250, 156 F.2d 239, 70 USPQ 412, 415. Accordingly, the Office is misapplying case law, and therefore, claim 25 is allowable.

Independent claim 42 is amended to recite, "the sphere determining a **single surface** on which the plates are mobile relative to one another." Support for the amendment language is provided by exemplary embodiments of the inventions disclosed by the originally-filed application at, for example, at Fig. 3. Of the cited art, Worley teaches rotor blades 208

that move in a <u>plane</u> (Figs. 2 and 2A of Worley), not a <u>sphere</u>, and therefore, it is inconceivable that Worley teaches "the sphere determining a **<u>single</u> <u>surface</u>** on which the plates are mobile relative to one another" as positively recited by independent claim 42. Furthermore, Kaufman teaches mirror segments 18a that move in curved slots 44 via plates 34 and pins 38 (col. 3, lines 30-50; Fig. 1). However, the curvature of each slot 44 as shown in Fig. 1 of Kaufman clearly demonstrates that the mirror segments 18a do not move in a "**<u>single</u> [spherical]** surface" because the respective slots 44 shown are too close together for their shown curvatures to form a single spherical surface. The Office is respectfully reminded that even though the mirror segments 18a of Kaufman meet together at a center point 18b (Fig. 2), this is **not** a teaching that mirror segments 18a move on a "**single [spherical]** surface" as positively recited by independent claim 42. Accordingly, Kaufman and Worley, singularly or in any combination, fail to teach or suggest "the sphere determining a **<u>single surface</u>** on which the plates are mobile relative to one another" as positively recited by independent claim 42. Independent claim 42 is allowable.

Claims 43-44 depend from allowable independent claim 42, and therefore, the dependent claims are at least allowable for depending from an allowable independent claim. In addition, the dependent claims are allowable for reasons that are distinct to the allowability of independent claim 42.

LO29\030\M03 210295.doc

This application is now believed to be in immediate condition for allowance, and action to that end is respectfully requested. If the Examiner's next anticipated action is to be anything other than a Notice of Allowance, the undersigned respectfully requests a telephone interview prior to issuance of any such subsequent action.

Respectfully submitted,

Dated: 3-29-10   By: _____
                             D. Brent Kenady
                             Reg. No. 40,045

LO29\030\M03 210295.doc